



Shenzhen Belling Efficiency Testing Laboratory Co.,Ltd.  
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Client:

LumCAT: LL4SR-3018K

Luminaire:

Report No:

Ballast type:

Test No:

Voltage(V): 120.06

LampCAT:

Current(A): 0.1370

Lamp flux(lm): -1.0

Power (W): 16.29

Number of Lamps: 1

PF: 0.9869

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

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### Photometric Results

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Lumens(lm): 783.96, Efficiency(%): 0.00% , Luminous Efficacy(lm/W): 48.13

Central intensity(cd): 306.804, Maximum intensity(cd): 312.473

Angle of maximum intensity: C=90.0  $\gamma$ =5.0

Beam Angle(50%Imax): [C0/180]Total=104.1

[C90/270]Total=105.0

Field angle(10%Imax): [C0/180]Total=149.8

[C90/270]Total=149.7

Maximum s/h(1/2): C0\_180=1.28 C90\_270=1.27

Maximum s/h(1/4): C0\_180=1.38 C90\_270=1.36

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 0.00%

Up flux rate of LUM(%): 0.78%

Down flux rate of LUM(%): 99.22%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 83.546%

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Equipment: GMS-3000  
Temperature(°C): 25

Date:  
Humidity(%): 59%

Operator: Tester

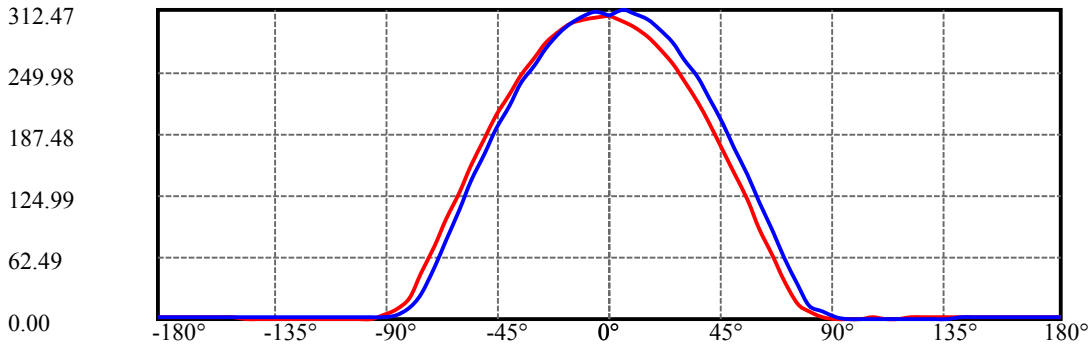
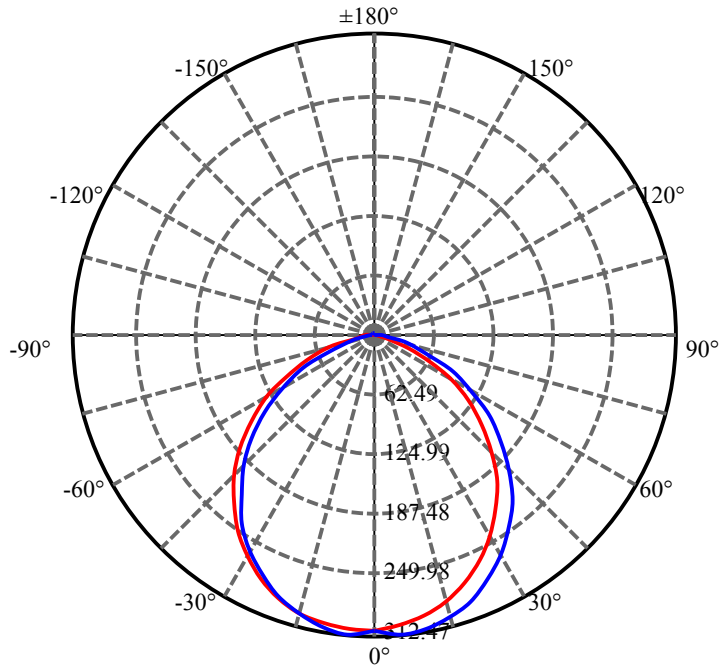
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	306.804	0.000	0	0.00%	0.00%
5.0	305.937	7.325	7.325	0.00%	0.93%
10.0	301.571	21.732	29.058	0.00%	3.71%
15.0	295.034	35.390	64.448	0.00%	8.22%
20.0	285.243	47.823	112.271	0.00%	14.32%
25.0	271.800	58.423	170.694	0.00%	21.77%
30.0	255.551	66.737	237.431	0.00%	30.29%
35.0	236.207	72.415	309.846	0.00%	39.52%
40.0	214.402	75.181	385.026	0.00%	49.11%
45.0	190.506	74.972	459.998	0.00%	58.68%
50.0	164.916	71.818	531.817	0.00%	67.84%
55.0	137.924	65.848	597.664	0.00%	76.24%
60.0	109.979	57.302	654.966	0.00%	83.55%
65.0	82.088	46.692	701.658	0.00%	89.50%
70.0	54.857	34.675	736.334	0.00%	93.93%
75.0	30.459	22.300	758.634	0.00%	96.77%
80.0	13.840	11.853	770.487	0.00%	98.28%
85.0	5.743	5.321	775.808	0.00%	98.96%
90.0	1.614	2.014	777.822	0.00%	99.22%
95.0	0.635	0.616	778.438	0.00%	99.30%
100.0	0.794	0.388	778.827	0.00%	99.35%
105.0	0.741	0.411	779.237	0.00%	99.40%
110.0	0.767	0.394	779.632	0.00%	99.45%
115.0	0.714	0.375	780.007	0.00%	99.50%
120.0	0.926	0.399	780.406	0.00%	99.55%
125.0	0.926	0.428	780.834	0.00%	99.60%
130.0	1.006	0.420	781.254	0.00%	99.65%
135.0	1.112	0.428	781.682	0.00%	99.71%
140.0	1.165	0.421	782.103	0.00%	99.76%
145.0	1.244	0.402	782.505	0.00%	99.81%
150.0	1.270	0.370	782.875	0.00%	99.86%
155.0	1.270	0.322	783.197	0.00%	99.90%
160.0	1.297	0.269	783.466	0.00%	99.94%
165.0	1.244	0.209	783.676	0.00%	99.96%
170.0	1.376	0.155	783.831	0.00%	99.98%
175.0	1.323	0.097	783.927	0.00%	100.00%
180.0	1.294	0.031	783.959	0.00%	100.00%

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	237.43	N.A.	30.29%
0-40	385.03	N.A.	49.11%
0-60	654.97	N.A.	83.55%
0-90	777.82	N.A.	99.22%
0-120	780.41	N.A.	99.55%
0-180	783.96	N.A.	100.00%
60-90	122.86	N.A.	15.67%
90-120	2.58	N.A.	0.33%
90-130	3.43	N.A.	0.44%
90-150	5.05	N.A.	0.64%
90-180	6.11	N.A.	0.78%
0-57.57	627.17	N.A.	80.00%

## ZONAL LUMEN SUMMARY

0-10	29.06
10-20	83.21
20-30	125.16
30-40	147.60
40-50	146.79
50-60	123.15
60-70	81.37
70-80	34.15
80-90	7.34
90-100	1.00
100-110	0.81
110-120	0.77
120-130	0.85
130-140	0.85
140-150	0.77
150-160	0.59
160-170	0.36
170-180	0.10



C0/C180: —

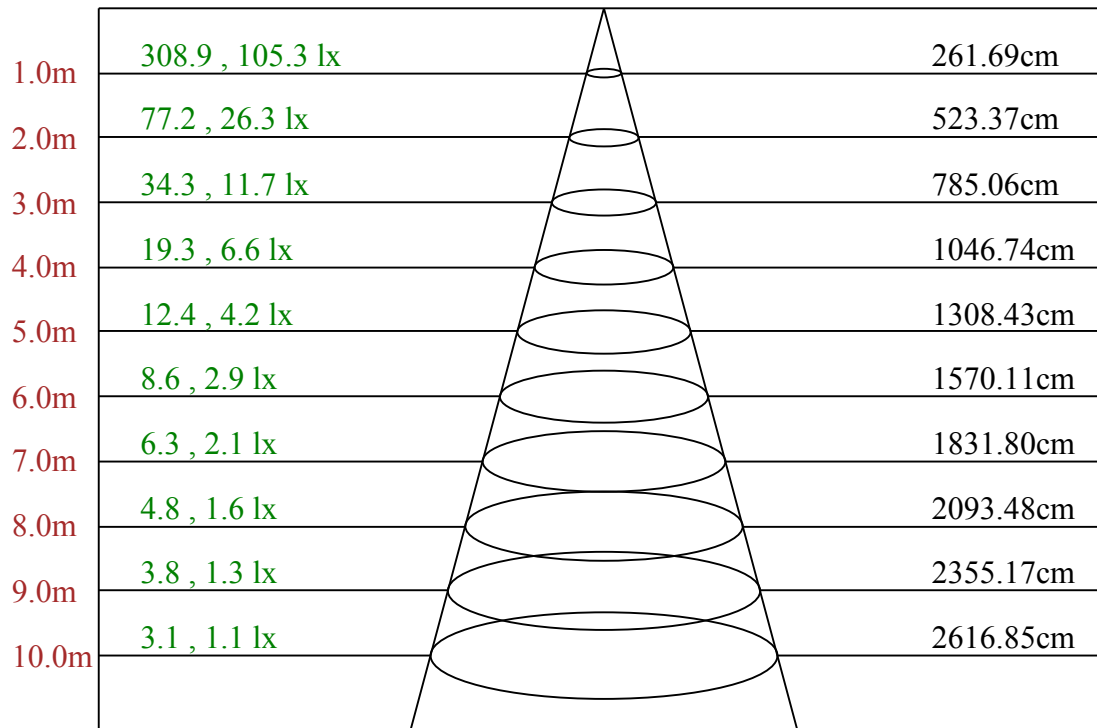
C90/C270: —

Field angle(10%Imax):C0/180Left:78.1 Right:71.7

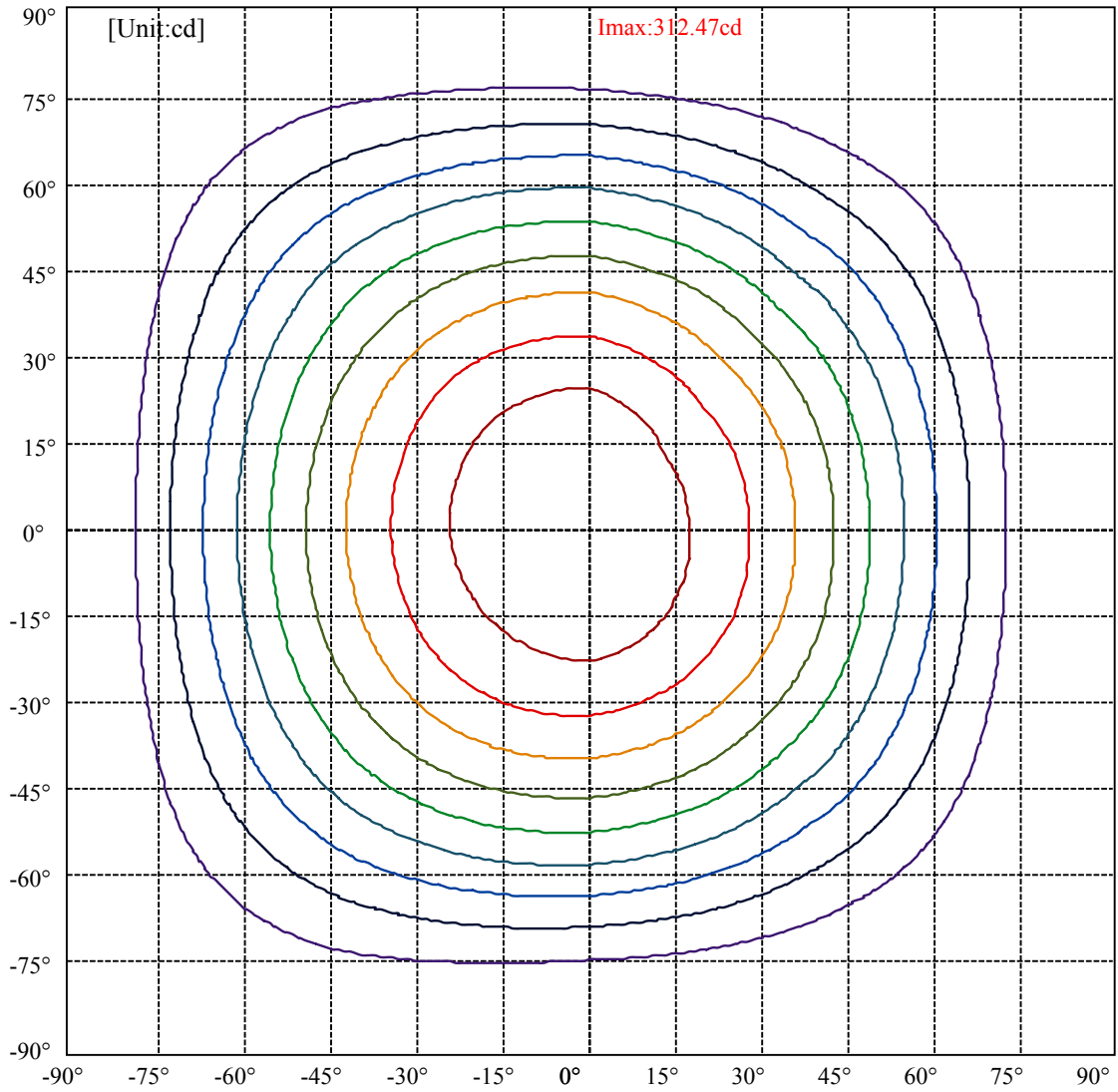
:C90/270Left:73.9 Right:75.8










Beam Angle(50%Imax):C0/180Left:55.4 Right:48.7

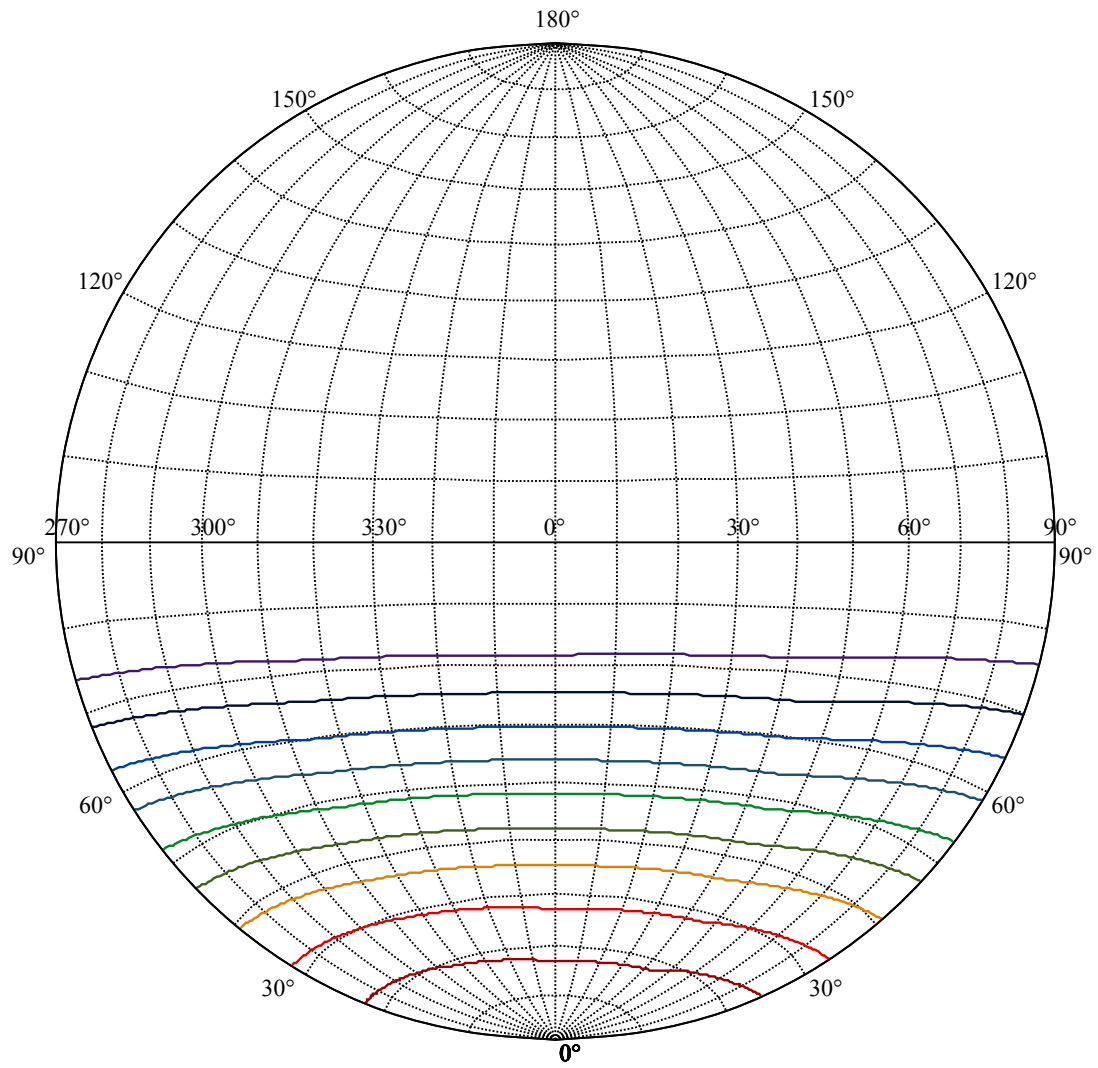
:C90/270Left:51.9 Right:53.1



Max , Ave      Beam angle of C90 plane 105.22



(10%Imax) 31.2473	
(20%Imax) 62.4946	
(30%Imax) 93.7419	
(40%Imax) 124.989	
(50%Imax) 156.236	
(60%Imax) 187.484	
(70%Imax) 218.731	
(80%Imax) 249.978	
(90%Imax) 281.226	



House

[Unit:cd]

Road

<b>Imax:312.47</b>	—
(10%Imax) 31.2473	—
(20%Imax) 62.4946	—
(30%Imax) 93.7419	—
(40%Imax) 124.989	—
(50%Imax) 156.236	—
(60%Imax) 187.484	—
(70%Imax) 218.731	—
(80%Imax) 249.978	—
(90%Imax) 281.226	—

## Intensity data(cd)

C/ $\gamma$ (°)	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
0.0	306.80	301.68	294.90	286.22	273.52	257.85	240.28	219.96	197.31
45.0	306.80	300.62	294.90	287.70	277.12	261.66	244.09	223.77	200.06
90.0	306.80	312.47	308.45	302.95	293.63	279.66	262.30	243.67	222.71
135.0	306.80	307.60	305.70	300.19	292.57	281.14	266.75	248.54	227.58
180.0	306.80	305.49	302.52	298.29	290.46	279.02	264.63	246.85	226.95
225.0	306.80	303.79	300.62	294.90	286.86	276.06	262.51	243.67	223.13
270.0	306.80	310.99	306.97	299.56	288.34	273.73	257.01	237.95	214.88
315.0	306.80	304.85	298.50	290.46	279.45	265.26	246.85	225.25	202.60
360.0	306.80	301.68	294.90	286.22	273.52	257.85	240.28	219.96	197.31
C/ $\gamma$ (°)	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
0.0	171.69	146.71	119.40	91.46	63.72	38.32	15.24	7.83	1.69
45.0	175.08	147.77	120.04	93.15	66.05	41.07	20.54	9.10	3.18
90.0	198.15	172.75	145.86	118.34	89.97	61.18	34.51	13.34	7.41
135.0	204.08	178.25	152.00	124.06	95.05	67.32	42.34	20.96	9.10
180.0	205.14	181.85	155.81	128.50	101.83	73.88	46.79	20.96	9.53
225.0	200.27	175.93	149.25	121.09	93.57	65.42	40.01	19.05	8.05
270.0	192.44	166.40	139.30	110.30	80.45	51.87	25.19	11.22	4.45
315.0	177.20	149.67	121.73	92.94	66.05	39.80	19.05	8.26	2.54
360.0	171.69	146.71	119.40	91.46	63.72	38.32	15.24	7.83	1.69
C/ $\gamma$ (°)	90.0	95.0	100.0	105.0	110.0	115.0	120.0	125.0	130.0
0.0	0.85	0.85	0.85	1.06	0.85	0.85	1.06	1.06	1.27
45.0	0.64	0.85	0.85	1.06	1.06	0.64	1.06	0.85	1.06
90.0	1.27	0.64	0.64	0.64	0.85	0.64	0.85	0.85	0.85
135.0	2.96	0.21	0.64	0.64	0.42	0.42	0.64	0.64	0.64
180.0	2.96	0.21	0.42	0.21	0.42	0.42	0.64	0.64	0.85
225.0	1.91	0.42	0.42	0.21	0.42	0.42	0.85	0.85	0.64
270.0	1.27	1.06	1.48	1.27	1.27	1.27	1.27	1.48	1.69
315.0	1.06	0.85	1.06	0.85	0.85	1.06	1.06	1.06	1.06
360.0	0.85	0.85	0.85	1.06	0.85	0.85	1.06	1.06	1.27
C/ $\gamma$ (°)	135.0	140.0	145.0	150.0	155.0	160.0	165.0	170.0	175.0
0.0	1.06	1.06	1.06	1.27	1.27	1.27	1.27	1.27	1.27
45.0	1.48	1.27	1.27	1.27	1.27	1.48	1.06	1.27	1.06
90.0	0.85	1.06	1.27	1.27	1.27	1.06	1.27	1.48	1.48
135.0	0.85	1.06	1.27	1.06	1.06	1.27	1.06	1.27	1.06
180.0	0.85	0.85	0.85	1.06	1.06	1.06	1.06	1.27	1.06
225.0	0.64	1.06	1.06	1.06	1.06	1.06	1.06	1.27	1.27
270.0	1.69	1.69	1.91	1.91	1.91	1.91	1.91	1.91	2.12
315.0	1.48	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27
360.0	1.06	1.06	1.06	1.27	1.27	1.27	1.27	1.27	1.27
C/ $\gamma$ (°)	180.0								
0.0	1.29								
45.0	1.29								
90.0	1.29								
135.0	1.29								
180.0	1.29								
225.0	1.29								
270.0	1.29								
315.0	1.29								
360.0	1.29								